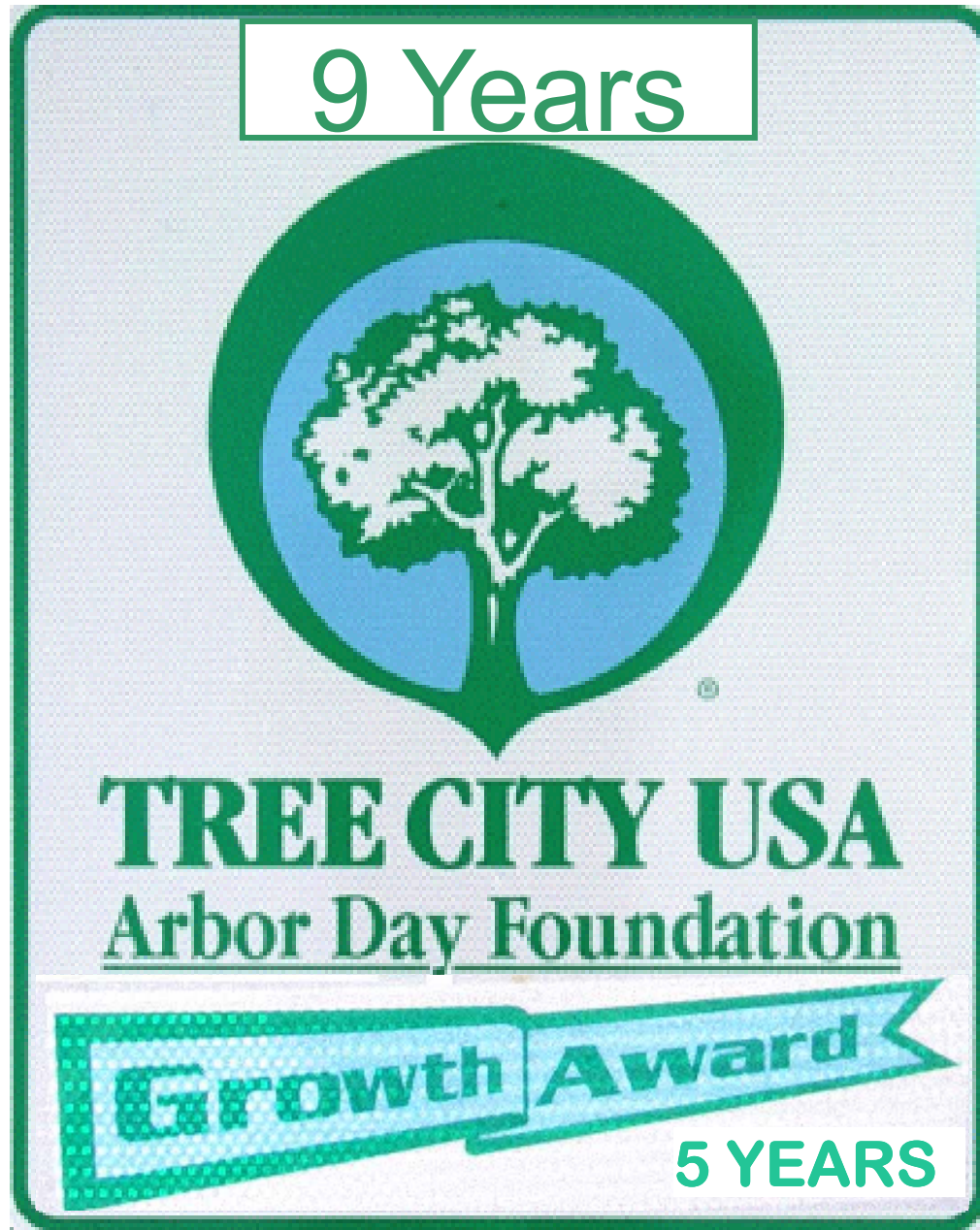


Report on the Urban Forestry Program for 2009



City of Evansville

Tree Advisory Board & Department of Urban Forestry

Introduction & History

This publication was developed to describe the accomplishments of the City of Evansville Tree Advisory Board and Department of Urban Forestry for the year of 2009, with some statistics of the accomplishments since the establishment of the program in 2001.

The general goals of the Evansville Urban Forestry program are to improve the quality of life for Evansville residents through increasing the number of trees and improving tree health and longevity through improved public tree care, Arborist (tree pruner's) Licensing, and public education.

No management plan can exist without knowledge of what resources exist. In 2003, the city conducted an inventory of 10,088 public and street trees.

Total Annual Benefits of Public Trees using i-Tree software developed by USDA

Zone	Energy	CO2	Air Quality	Stormwater	Aesthetic/ Other	Total (\$)
Parks	\$40,106.64	\$10,189.72	\$3,389.17	\$130,425.01	\$137,507.34	\$321,617.87
Street Trees				\$119,924.03		\$119,924.03
Boulevards				\$22,779.05		\$22,779.05
Cemeteries	\$25,232.68	\$6,056.45	\$5,863.52	\$86,944.97	\$67,951.22	\$192,048.83
Downtown				\$36,537.11		\$36,537.11
Citywide total	\$65,339.32	\$16,246.16	\$9,252.69	\$396,610.16	\$205,458.56	\$692,906.89

This valuation does not include trees in forested areas. Our department has estimated, from aerial photographs, over 3000 acres of forested areas exist within the city limits on both public and private property. Forested areas require minimal management, therefore, benefits gained from forested areas have few costs.

In addition, this valuation does not include trees on private property. A majority of the trees in Evansville are on private property, therefore the valuation that we gain from trees in Evansville is much greater than the estimates given above.

Without a board and department to manage the urban forestry programs, these benefits would diminish greatly. The Department of Urban Forestry and Tree Advisory board is currently working towards the maintaining an inventory of public and street trees, planting the right tree in the right places, proper pruning, protection/preservation of trees/greenspace where appropriate, and education of the public concerning tree care.



Importance of Trees to Our City

We would not have an urban forestry program if trees were not important to us. Trees provide many benefits to us, although some of these benefits are not immediately visible. For trees to provide maximum benefits to our community we must inventory, plant, and preserve trees now. This would not be possible without an urban forestry program. The following are the benefits that trees provide to an urban community:

- ✿ **Increasing property values** – If the right tree is planted in the right place, and if such trees are maintained properly they can increase property values by more than 27% (Tree City USA Bulletin #28), and in doing so can increase the city tax base. Hedges and rows of trees can be used to screen unsightly areas, reduce high winds from open areas or highways, and reduce noise from traffic or other loud sources. Trees can also make commercial districts more attractive, therefore attracting more potential customers to such areas. Customers willingness to pay for products in such districts may increase by as much as 11% as a result*.
- ✿ **Lowering energy costs** – Trees can reduce utility bills through evapotranspiration and shading buildings in the summer, and reducing cold winds in the winter (10-12%*). Canopy coverage from trees over streets can reduce sunlight hitting asphalt street surfaces, which can reduce the resurfacing time of streets.
- ✿ **Intercepting rain water and lower soil erosion** – Trees intercept rain water before reaching the ground. This greatly reduces the amount of storm water that reaches public storm water facilities, therefore lowering storm water facility costs. Trees can also reduce the amount of potential flooding through this process. Through the interception of rainfall, trees lower the amounts of soil erosion by intercepting rain droplets that may impact soil, reducing amounts of storm water runoff over existing soils, and lowering the amounts of soil saturation through interception and evapotranspiration.
- ✿ **Reducing air and water pollution** – Trees reduce toxicities in our air and water through taking up particulates through natural gas and liquid exchanges, which provides a healthy environment. Trees can also reduce the amount of gaseous emissions from parking lots and street pavements by shading them. By reducing energy consumption, trees also reduce power plant emissions.
- ✿ **Improving quality of life** – These are perhaps the most overlooked benefits that trees provide to us. They are difficult to quantify and calculate, but are present, and are perhaps more important to the public than the physical benefits that they provide. Trees are relaxing to people by providing aesthetic beauty, recreation, and the overall feeling of psychological well being. Trees make people healthier psychologically through relaxing, relieving mental fatigue, and reducing aggressions, therefore helping to increase social interactions and lowering crime rates. This can have an indirect effect on the community by lowering amounts of police enforcement expenditures, and better the overall appeal of the city to those outside the community.

* figures taken from "Lower Midwest Community Tree Guide. Benefits, Costs, and Strategic Planting" publication.

Evansville Tree Advisory Board

The Evansville Tree Advisory Board was established by the Evansville Tree Ordinance, and commenced monthly board meetings in May of 2001. The board consists of seven voluntary members. The duties and accomplishments of the Tree Board are as follows:

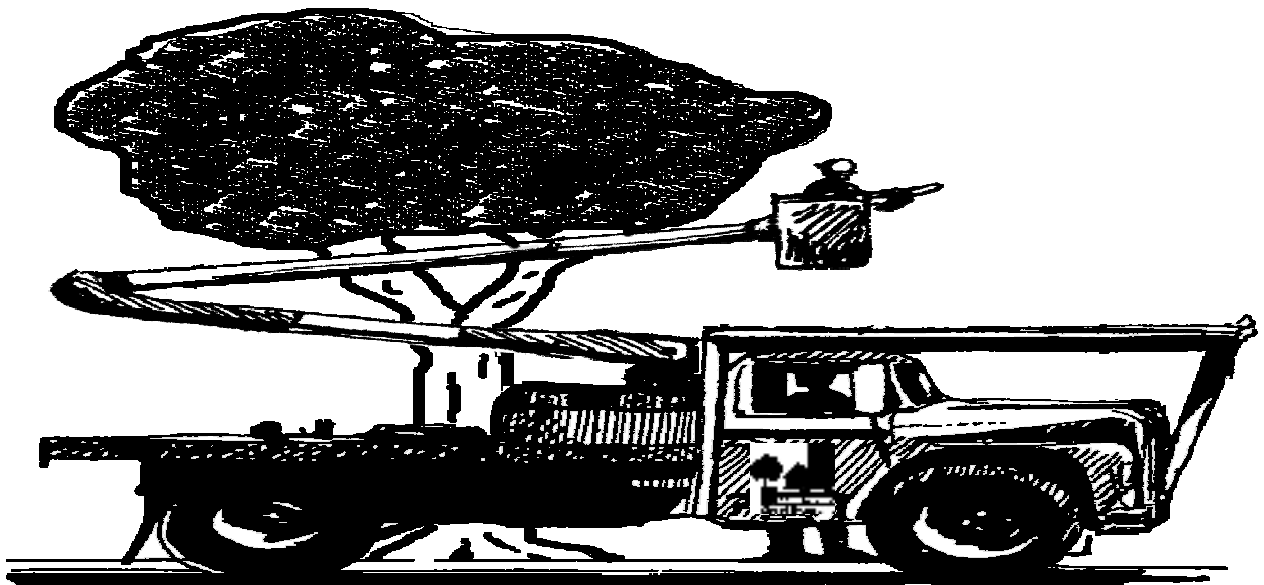
- 🌳 Facilitate the growth of the tree inventory by at least 2 to 1 ratio for each tree removed.
- 🌳 Study the problems and determine the needs of the City in connection with the development and execution of a tree-planting program.
- 🌳 Assist the properly constituted officials of the City and citizens of the municipality concerning trees.
- 🌳 Provide regular and special meetings for tree related issues.
- 🌳 Coordinate its efforts with related projects of other public and not-for-profit groups.
- 🌳 Communicate with the State Highway Department as to any highway projects which would affect public trees.
- 🌳 Enforcement of the Evansville Tree Ordinance.
- 🌳 Review all plans for preserving existing public trees and planting new public trees.
- 🌳 Recommend to be removed any public tree or part thereof which is in an unsafe condition or is injurious to utilities, public improvements, or other trees.
- 🌳 Recommend to the proper authority trees to be planted upon city-owned streets or in parks.
- 🌳 Issue permits as required by the Evansville Tree Ordinance.
- 🌳 Govern all aspects of the city's Arborist (Tree Pruner's) Licensing program.
- 🌳 Conduct educational and fund-raising campaigns as necessary and work with private and public agencies and organizations to establish programs for planting and care of public trees.
- 🌳 Establish a non-reverting tree capital improvement fund to be used by the Board to accept public and private sector resources for programs of the Board.
- 🌳 Annually submit a budget to the Common Council for appropriation of the funds aforementioned.



Department of Urban forestry

The Evansville Department of Urban Forestry was established and began operations in June of 2001, and is under the Department of Transportation and Services. The department consists of four full time tree crew workers, and is managed by the Evansville City Arborist. The duties of the Department of Urban Forestry are as follows:

- ♣ Accomplishing the day to day activities of hazard tree and tree limb removal.
- ♣ Removing tree debris created by storms from improved public right of ways.
- ♣ Maintaining the existing inventory of public and street trees.
- ♣ Supervising the Arborist (Tree Pruner's) Licensing program.
- ♣ Applying for and administering outside grant funding.
- ♣ Presenting tree related materials to public.
- ♣ Developing and disseminating educational materials pertaining to trees.
- ♣ Inspecting and making recommendations for public tree issues.
- ♣ Planning, performing, and assisting with public tree plantings.
- ♣ Recertifying for annual Tree City USA status.
- ♣ Planning and supervision of annual Arbor Day event.
- ♣ Coordinating with other government agencies, not-for-profit groups, and the public concerning tree related activities and issues.



Department of Urban Forestry - Monthly Report 2009

	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Totals
Trees Removed	3		6	3	4	10	6	3	4	13	9	4	65
Trees Pruned	27	2	4	20	10	22	15	12	36	13	10	102	273
Alleys Pruned	1				1	6	13	9	1		1		32
Brush Cleared (feet)						1000				4700			5700
Stumps Ground	5				5	1							11
Tree Planted**			20								1		21
Assisted other plantings											131		131
Debris Pick Up		1	3	2	4	1	1	1			1		14
Monthly Job Totals*	36	3	33	25	24	40	35	25	41	26	22	106	416
# Storms generating debris		1				1							2
# Debris locations		NA***				1							1
Tree Pruners Fined										1			1
Public Seminars	2	1	3	4	1		1		3	1	2	2	20

Tree Planting:Removal Ratio = 2.3385

* Totals do not include work done by other Departments

** Report does not include 18 trees that were transplanted by city tree crew in preperation of downtown arena project.

*** Indicates 2009 Ice storm that produced city wide tree debris clean up initiative.

2009 Accomplishments

- ✿ Managed the mitigation of the 2009 Ice Storm, which was the most significant storm affecting tree debris since the tree program was established. The Department of Urban forestry reported \$217,378.37 in equipment, materials, and labor used for the tree debris clean up effort to FEMA. The clean up effort lasted about 3 months.
- ✿ Established consistent standards for tree maintenance and planting on state properties in Evansville through adoption of a memorandum of understanding with INDOT.
- ✿ Assisted APC with Parking Lot Landscaping code development.
- ✿ Continued Arbor Day Ceremonies, and maintained the City's Tree City USA status for the 9th consecutive year. Also Received Growth Award for 5th consecutive year.
- ✿ Provided guidance for the planting of 131 trees at Bellemeade Pool, Howell Pool, and the latest phases of the Greenway.
- ✿ Celebrated 1st annual Tree Hugger Day on October 17
- ✿ Assisted in developing and performing tours and programs for the first annual Treemendous Tree Tours at Wesselman Woods on November 7.



Other Accomplishments since 2001

- ✿ Reduced tree topping in Evansville through public education, and education of local tree companies.
- ✿ Conducted city's Arborist (Tree Pruner's) Licensing program, and are currently providing Ordinance Compliance seminars for the program.
- ✿ Completed tree inventory, and placed inventory on public GIS web site.
- ✿ Developed Arboricultural Specifications Manual and Landscape Guidelines. Proposed guidelines to be used in contractual tree planting for new public developments.
- ✿ Developed the Urban Forestry Management Plan, and Emergency Tree Debris Removal Plan.
- ✿ Maintained a positive 2 for 1 tree planting ratio since the beginning of the program
 - ✂ Tree planting/removal ratio for 2009 = 152 planted / 65 removed = 2.3 trees planted for each tree removed in 2009.
 - ✂ Tree planting/removal ration for 2001-2009 = 1,257 planted / 581 removed = 2.16 trees planted for each tree removed since 2001.

Goals for 2009

- ✦ Establish consistent standards for tree maintenance and planting on state properties in Evansville through adoption of a memorandum of understanding with INDOT.
- ✦ Develop Urban Re-Leaf Program for replacing street trees.
- ✦ Assist APC with Parking Lot Landscaping code development.
- ✦ Revise Arboricultural Specifications Manual.
- ✦ Updating the current tree inventory.
- ✦ Work with EPA to preserve or replace trees removed during soil contamination cleanup efforts.



Continuous Goals

- ✦ Maintaining our status as a Tree City USA community. The following requirements are needed to maintain the Tree City USA status:
 - ✦ Maintaining a minimum of \$2 per capita for the purpose of management of trees.
 - ✦ Having an active tree board, department, and arborist to manage the program.
 - ✦ Enforcing an active ordinance to help protect existing public trees.
 - ✦ Celebrating an annual Arbor Day Celebration.
- ✦ Creating new programs to maintain Tree City USA Growth Award status.
- ✦ Organizing and Conducting annual Arbor Day Celebrations.
- ✦ Planting, pruning, and removing trees where needed for public safety.
- ✦ Supporting and coordinating between vital government agencies and Not-for-profit groups concerning trees.
- ✦ Developing programs and activities for public education and involvement for tree planting and care in the community.
- ✦ Administering the enforcement of commercial tree pruner's licensure, Arboricultural Specifications Manual, and the Emergency Tree Debris Management Plan.
- ✦ Monitor for Emerald Ash Borer, and initiate plan when it is found in Evansville.
- ✦ Continue to replace trees in tree wells downtown as trees die or outgrow their space.

In addition to these programs, we are always coming up with new programs, and are always open to comments and suggestions.